DOCUMENT RESUME

ED 251 794 CS 007 830

AUTHOR Hayes, David A.; Alvermann, Donna E.
TITLE A Cyclical Plan for Using Study Strategies.
PUB DATE 84
NOTE 8p.; "Forum for Reading" is the journal of the College Reading Improvement Special Interest Group of the International Reading Association.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)
JOURNAL CIT Forum for Reading; v15 n2 p47-52 Spr-Sum 1984

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Cognitive Processes; *Content Area Reading; Higher Education; *Intentional Learning; Language Processing; Learning Strategies; Reading Habits; *Reading Improvement; *Reading Strategies; Secondary Education; Student Participation; Student Role; *Study Skills

ABSTRACT

A cyclical plan for studying that takes into account information processing strategies and their effective management by students consists of (1) specifying study purposes, (2) previewing the materials, (3) proceeding through the task incrementally, and (4) connecting the content to be learned to other knowledge about the material studied. Setting effective study goals requires that the student know the reasons for undertaking a particular study task and set objectives to be reached when it is completed. In previewing, the student skims the text and actively searches for clues to accomplish the goal of the study activity. On the basis of the preview, the student can mentally segment the text into components smaller than the sections marked by headings or subheadings, and then deal with the text in parts small enough to recite content relevant to the study task. As the student proceeds through the text, interim review of text segments studied helps pull the material together and fosters a growing sense of the significance of the content. The purpose of global review is to bring closure to the study of a text in a way that will render it memorable and useful for further study. The final consideration in the cyclical framework is preparing for a unit test, at which point students augment their notes with information gained from supplementary materials. (HOD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED251794

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

A Cyclical Plan for Using Study Strategies

David A. Hayes and Donna E. Alvermann

FORUM FOR READING

Volume 15 Spring/Summer 1984 Number 2

CS 007 830

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Rona F. Flippo

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A cyclical plan for using study strategies

David A. Hayes and Donna E. Alvermann
University of Georgia
Athens, Georgia

You've identified study skill needs, assessed student motivation and attitudes toward reading, written objectives for your individualized instructional program, and incorporated a variety of sound study skill strategies into your teaching repertoire. So, you ask yourself, why aren't more of the students in your Learning Skills Center applying their newly acquired skills for effective and efficient learning? Maybe your students haven't learned how to learn. Maybe they have acquired knowledge of, and a fair degree of competence in, several useful study strategies, but perhaps they lack a general plan for studying on their own.

Webster's definition of study, "...a process of acquiring by one's own efforts knowledge of a subject," implies that one purpose for teaching study skills is to enable students to become independent learners. Trembley's (1982) advice to study skills teachers supports this definition. He advises that teachers help students take responsibility for their own learning.

Although research on the most effective ways to teach students how to study is not new (see Krumboltz & Farquhar, 1957), it is nonetheless relatively scarce. According to a survey of 213 accredited institutions in 11 southeastern states (Gordon & Flippo, 1983), postsecondary reading faculty identified the area of how to teach study skills as one of the five areas they felt most in need of further research. Based on the limited number of studies available, however, it appears that students who successfully complete a college study skills course earn significantly higher and stable grade point averages than they did before taking the course (Robyak & Downey, 1979).

Traditionally, the starting point for study skills instruction has been the indentification, isolation, and teaching of specific cognitive processes known to relate to successful studying. Thus, techniques for improving memory of what is read, such as SQ3R (Robinson, 1946) and ReQuest (Manzo, 1980) have been used. Notetaking with T-Notes (Davis & Clark, 1982) and notetaking system for learning (Palmatier, 1973) represent the type of strategies introduced to help students integrate information from the teacher's lecture with that of the assigned text. While these information-processing strategies are valuable in their own right, there would appear to be an even better use made of them if they were to be incorporated into a larger plan for studying, one that the student takes the responsibility for managing.

Recent advances in cognitive psychology have led to a new conception of the student's role in the teaching-learning process. Weinstein (1982), for instance, asserts that:

> Rather than portraying learners as passive participants who assimilate knowledge in a mechanical manner, these new conceptions characterize learners as active information processors, interpreters, and synthesizers. Students who know how to use effective strategies to organize and monitor learning, memory, and information retrieval can take greater responsibility for their own learning and become more instrumental in adapting the learning environment to fit their individual needs and goals. (p. 6)

Effective application of this theoretical notion may best be realized by helping students break down the information presented by the textbook and the instructor so that students will be able to manage their own learning. Smith (1982, p. 11) suggests the following:

1. Deal with "whole" texts (for example, entire chapters or articles) as the primary unit of study.
2. Encourage students to change tasks while studying, to keep on the move.
3. Develop awareness of study as a series of decisions by which one defines and solves problems. This decision making requires trial and error behavior.
4. Emphasize synthesis of information from different sources. In every class, students have at least two vital external sources of information, the text and the lecturer. Beyond that are many others, including supplementary texts, other students, and other media.

In the present article, we propose a cyclical plan for studying that takes into account these information processing strategies and their effective management by students. It is a study cycle within which specific information processing strategies can be applied flexibly. Within the cycle specific study strategies can vary from one study situation to another, and within each study situation, it can vary from one facet of study to another. But the overall study cycle itself remains invariant in its structure. Essentially it consists of specifying study purposes, previewing the materials, proceeding through the task incrementally, and connecting the content to be learned to other knowledge about the material studied.

Setting Study Goals

Effective study requires purpose. It requires that the student know the reasons for undertaking a particular study task and set objectives to be reached when it is completed. The better the student understands the reasons for a study task, the sharper the student can focus the objectives of study and the more efficient the study activity is likely to be. A basic problem for the student is that college instructors seldom explicitly state their purposes for following a line of thinking or for adopting a particular sequence by which to present course content. The student must take the initiative to try to understand the instructor's thinking, to try to "psyche out" the instructor. If possible, the student may talk privately with the instructor to get suggestions about where to place emphasis in studying for the course and the course texts and even ask for study tips that the instructor believes helpful.

Without directly asking the instructor, the student can usually get a good idea of what the instructor deems important by sorting out what is said in class and examining it in light of introductory information given at the first meeting of the class and provided in the course syllabus. Sorting out the class discussion or lectures has the student identify the major concepts presented in class, note their supporting information, and determine how they fit together.

Typically instructors' presentations resemble textbook presentations. They introduce major concepts at the beginning of a lecture or segment of instruction, then during the lecture reiterate them with elaborative, clarifying information, and summarize them upon conclusion. Listening for points that are illustrated with anecdotes and noting

BEST COPY

information written on the chalkboard can help students identify significant course content. As soon as possible following class the student should actively reflect on the class discussion by reviewing class notes, organizing them according to importance and relatedness, and inspecting notes for evidence of content promised either in the earliest meeting of the class or in the course syllabus. On the basis of this review of class notes the student should come to a tentative decision—even if it means hazarding a guess—about what the instructor considers important and why it should be studied. How it can be studied successfully depends on the extent to which the student's study purposes coincide with the instructor's thinking about the content. To approximate a match between the two, the student should attempt to adopt the instructor's pattern of thinking about the material as it is revealed by emphasis and sequence in class presentations. Later, after the material is learned, this initial pattern of thinking can be discarded or reformulated to fit the student's own informed perspective. But to begin study, the student must decide upon a direction to take. The student's study direction is always indicated by the instructor's apparent instructional goals. These should be translated into the student's own study goals, formulated in terms of a purpose statement, and kept available for reference during study. Having a purpose statement written down helps the student stay on track when the frustrations of grasping abstract concepts and putting details into place tend to cloud the goals of study. Insights developed during study can be used to guide the student in amending the purpose statement. Once the student has decided upon a direction to take in studying and formulated a written statement of study goals, the student should then preview the text with an eye toward determining how it will be studied.

Preview

In previewing, the student skims the text for its gist and actively searches for clues to accomplishing the goal of the study activity. Most important of these clues are those to be found in the text's organization, its use of key terms in the headings, the kinds of information depicted in the illustrations, and the information emphasized in the end material, such as review questions and suggestions for further study. Content area texts are typically organized in such a way that major concepts are presented in the introductory portion of a text and summarized again at the end. The major concepts are often distilled into phrases that serve as headings of the text segments that develop them.

On the basis of the information gleaned during preview, the student can then make a plan for studying the text. The plan should be flexible, subject to revision, and appropriate to the goal established for studying. Flexibility cannot be overemphasized. Using incomplete data to predict the way that the study activity ought to go, the student should be aware that studying involves risk. The student may, for instance, determine that the goal of a particular study task is merely to identify specific instances of generalizations given in class and decide initially to scan parts of the text where the sought for instances are likely to be found. During preview, however, the student observes that instances presented in the text differ in importance, some occurring in highly specific or unusual circumstances. Given this additional information, the student will have to judge whether these differences will matter in achieving the instructional purpose intended by the instructor. If they do, revision of the study approach is in order. The study plan may even have to be

5 BEST COPY

scratched, time and effort may be lost, and another approach may have to be taken. Losses can be minimized, however, by incorporating into the plan allowance for unforeseen problems and provision for adjusting to them during study. Flexibility is probably best accomplished by dividing the text into parts and devising a subplan for studying each.

Intensive Incremental Study

On the basis of the preview, the student can mentally segment the text into components perhaps smaller than the text sections marked by headings or subheadings. The student can then deal with the text in parts small enough that through an appropriate active study response the student can recite content in ways relevant to the purpose of the study task. Most beginning college students can recite the essential information of as much as a page or two of a text, depending on the density of the content or ideas that bear reciting or remembering.

Once the text has been divided in this way the student should proceed incrementally. Each segment of the text should be read at least once and if upon first reading the material appears to warrant concentrated attention, the student should read the material again applying a study strategy that appears to best lend itself to dealing with the material. On first reading each text segment, the student should read to get its gist, note unfamiliar terms for later attention, and make a judgement about how the text segment may be important to accomplishing the student's study goal. If it lacks importance, make a mental note of it and move on to the next text segment. If it does seem important, decide how studying it might contribute to achieving the study objective and devote to it concentrated attention until the material can be recited in ways that are indicated by the purpose of the study task.

The student can respond to the text segments in a number of ways. The responses that are most likely to increase concentration and result in fuller understanding call for reacting to the text with a pencil. With a pencil the student can record the response to the text and come back to it later to check its focus, accuracy, and completeness. Among the most basic responses to a text are listing important information, paraphrasing the text, making up questions about the content, and making comparisons and contrasts in the material. Responses may take the form of formalized strategies advocated for teaching and learning from textual materials, e.g., RADAR (Martin, 1983), REAP (Eanet & Manzo, 1976), SAV (Manzo, 1981), SQ3R (Robinson, 1946), Survey Technique (Auker-man, 1972). The students may create mnemonic acronyms that arrange the first letters of key terms into word-like strings. For complex material it may help to graphically depict the relations that bind the material conceptually, particularly its sequential, chronological, and cause-effect relations. Radically new content can sometimes be initially understood by comparing it to something familiar to the student. By such comparison unfamiliar aspects of the novel content can be conceptualized as a provisional working model for understanding while its distinguishing features are sought and used to refine understanding of the new material. The responses may be mixed and matched as the student finds most helpful. However the responses are framed, the student should observe how the textual content overlaps and supports the material provided by the course instructor. Obviously, overlapping material should be targeted for special attention. Where the text and the instructor differ, the instructor's version must for practical reasons prevail in the student's mind, but a note should be made to seek clarification from the instructor.

When the student is satisfied that the text segment has been

BEST COPY

thoroughly treated, the next text segment should be dealt with in similar fashion. If on first reading it appears irrelevant to the study purpose the student should go on to the next text segment: if its content seems relevant to the study purpose, further study is needed. Again the student should decide on an active study response appropriate to the nature of the material and the study purpose. In each text segment considered worthy of concentrated study, the student should make a point of determining how each part of the text fits with other parts of the text.

As the student proceeds through the text, interim review of text segments studied helps pull the material together and fosters a growing sense of the significance of the content. Repetitive, cumulative, reviews also provide rehearsal and "deeper processing" of the material since it enhances attention to the semantic relations in the material. The interim reviews become progressively longer as more text segments are completed, but text segments previously reviewed are likely to require less and less time and attention. Once all text segments have been addressed, the student should be ready for a global review of the material studied.

Global Review

The purpose of global review is to bring closure to the study of a text in a way that will render it memorable and useful for further study. Global review begins with the student collecting his impressions of the material studied and constructing a summarizing statement. The statement should be couched in the student's own language and should reflect any opinions or overall conclusions that have been drawn. The student should try to personalize the material. To support this statement the student should recite top level information that has been studied, its associated propositions either implicit in the statement or capable of being compressed into generalized form. Further paring of extraneous and superfluous material takes place by eliminating from futher consideration information that does not contribute to achieving the study purpose. This is the time to underline or highlight, not before. It is not until this point in the study cycle that the student can be sure that the information marked is truly relevant to the study purpose and even then whether it is worth marking. The text should be marked sparingly. Material that has been thoroughly studied ordinarily requires minimal cues for recalling it. Excessive marking of the text provides little or no help for later review and can even distract and confuse the student about what is important to remember. The student should mark only enough text to stimulate memory of its associated information.

One final consideration in the cyclical framework of studying is preparing for a unit test. It is at this point that students should augment their notes with information gained from supplementary texts, films, filmstrips, videotapes, and other media. Because few texts are in every way superior to all others, checking with additional texts offers the possibility that other authors present the material under study in more readable, more meaningful ways. As the student checks other texts, note should be made of differences in the information presented and in where the emphasis is given. This elaboration of the material, acquired perhaps by comparing and contrasting the assigned textbook author's point of view with the views of others, serves two purposes. One, it will increase the student's depth and/or breadth of understanding of a topic and two, it may be the "frosting on the cake" in any essay or short-answer discussion question.

Ultimately students find their own best ways of studying. As a college skills instructor you can advance your students toward that end by

7 BEST COPY

providing a framework within which they can actively sift through material to be learned, translate it into their own language, and develop personalized formulas for understanding and remembering it. Through your encouragement and instruction, students can come to accept that successful study requires purpose, planning, and disciplined execution.

References

Aukerman, R. C. *Reading in the secondary classroom.* New York: McGraw-Hill, 1972.

Davis, A., & Clark, E. G. Note-taking with T-notes. *Journal of Developmental and Remedial Education*, 1982, 5, 8-9.

Eanet, M. G., & Manzo, A. V. REAP - A strategy for improving reading/writing/study skills. *Journal of Reading*, 1976, 19, 647-653.

Gordon, B., & Flippo, R. F. An update on college reading improvement programs in the southeastern United States. *Journal of Reading*, 1983, 27, 155-163.

Krumboltz, J. D., & Farquhar, W. F. The effect of three teaching methods on achievement and motivational outcomes in a how-to-study course. *Psychological Monographs*, 1957, 71, no. 443.

Manzo, A. A subjective approach to vocabulary, or ...I think my brother is arboreal. *Reading Psychology*, 1981, 1, 29-36.

Martin, C. E. Using RADAR to zero-in on content area concepts. *Reading Horizons*, 1983, 23, 139-142.

Palmatier, R. A. A notetaking system for learning. *Journal of Reading*, 1973, 17, 36-39.

Robinson, F. P. *Effective study.* New York: Harper, 1946.

Robyak, J. E., & Downey, R. G. The prediction of long-term academic performance after the completion of a study skills course. *Measurement and Evaluation in Guidance*, 1979, 12, 108-111.

Smith, S. Learning strategies of mature college learners. *Journal of Reading*, 1982, 2?, 5-12.

Trembley, D. Teaching study skills to the losers. *Curriculum Review*, 1982, 21, 257-258.

Weinstein, C. Learning strategies: The metacurriculum. *Journal of Developmental and Remedial Education*, 1982, 5, 6-7, 10.